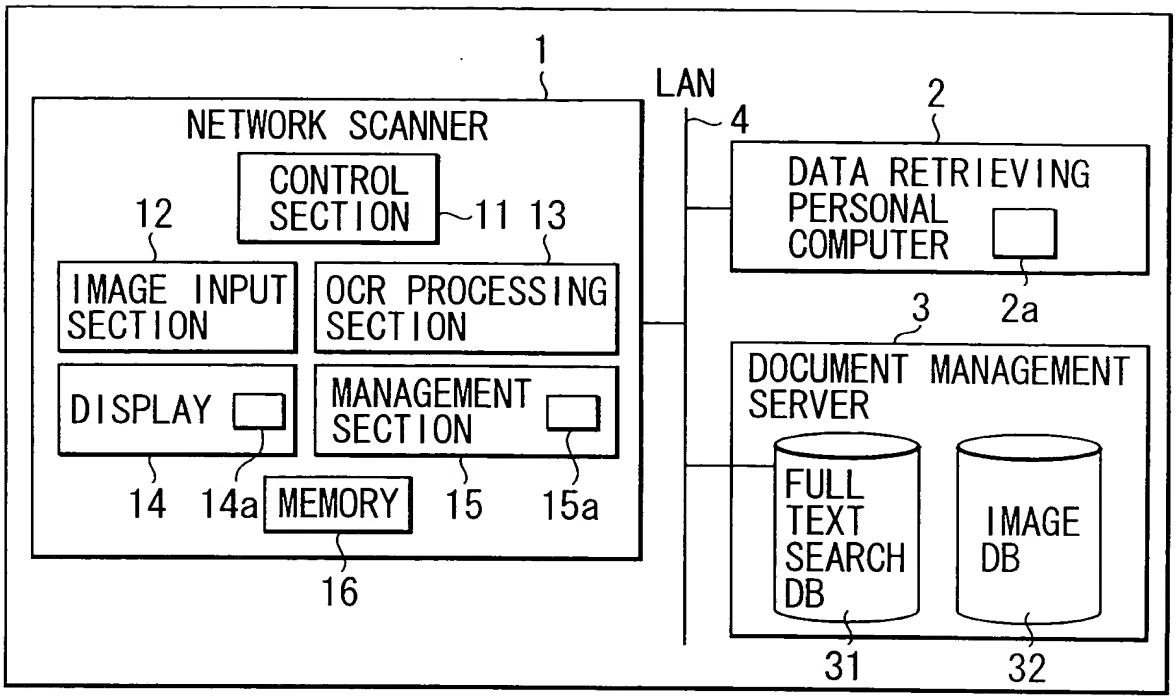
1
NETWORK SCANNER
CONTROL SECTION
11
12
13
IMAGE INPUT SECTION
OCR PROCESSING SECTION
DISPLAY
MANAGEMENT SECTION
14
14a
MEMORY
15
15a
16
LAN
4
2
DATA RETRIEVING PERSONAL COMPUTER
2a
3
DOCUMENT MANAGEMENT SERVER
FULL TEXT SEARCH DB
IMAGE DB
31
32

FIG. 1

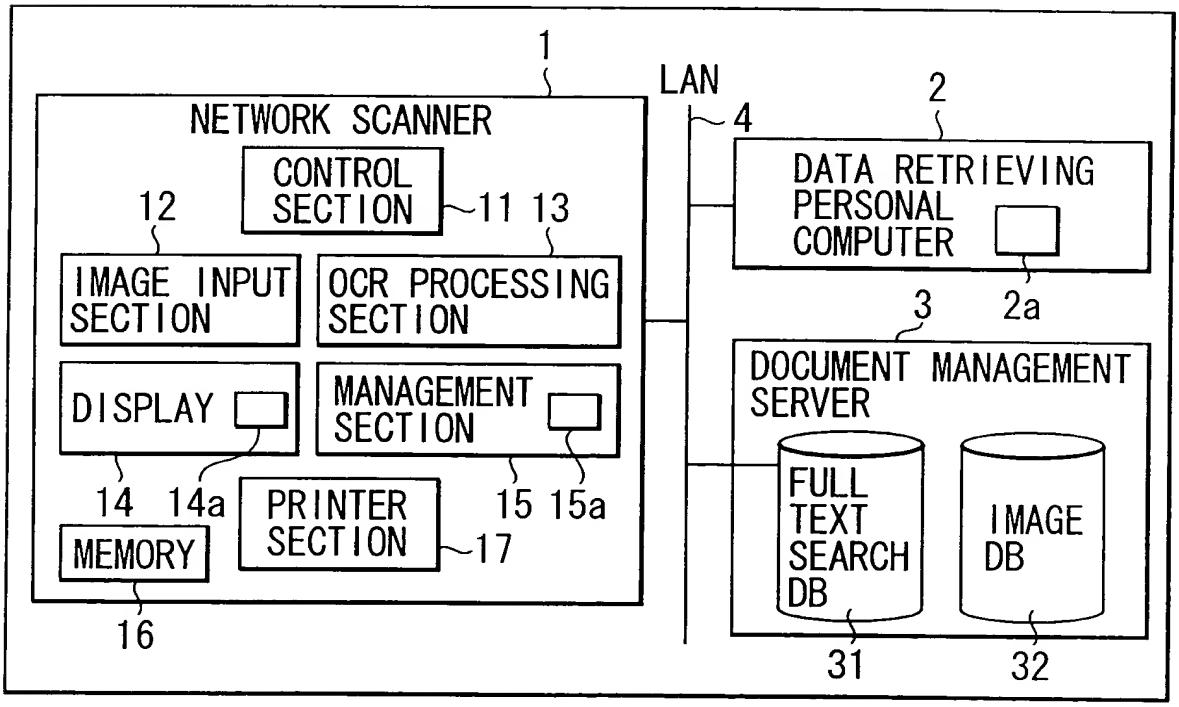
1
NETWORK SCANNER
CONTROL SECTION
11
12
13
IMAGE INPUT SECTION
OCR PROCESSING SECTION
DISPLAY
MANAGEMENT SECTION
14
14a
PRINTER SECTION
17
15
15a
MEMORY
16
LAN
4
2
DATA RETRIEVING PERSONAL COMPUTER
2a
3
DOCUMENT MANAGEMENT SERVER
FULL TEXT SEARCH DB
IMAGE DB
31
32

FIG. 2

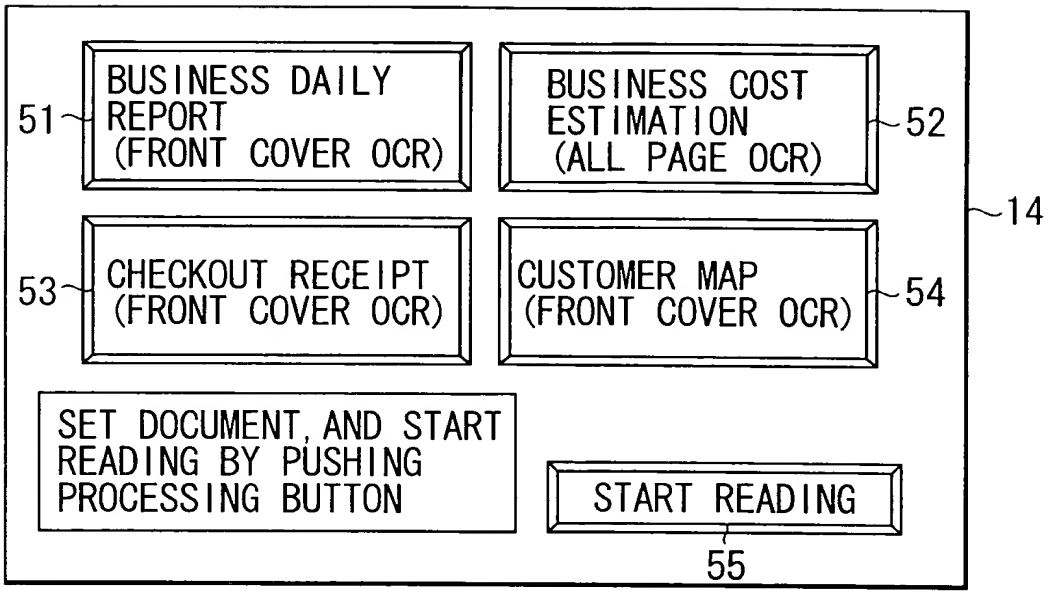
BUSINESS DAILY REPORT (FRONT COVER OCR)
51
BUSINESS COST ESTIMATION (ALL PAGE OCR)
52
14
CHECKOUT RECEIPT (FRONT COVER OCR)
53
CUSTOMER MAP (FRONT COVER OCR)
54
SET DOCUMENT, AND START READING BY PUSHING PROCESSING BUTTON
START READING
55

FIG. 3

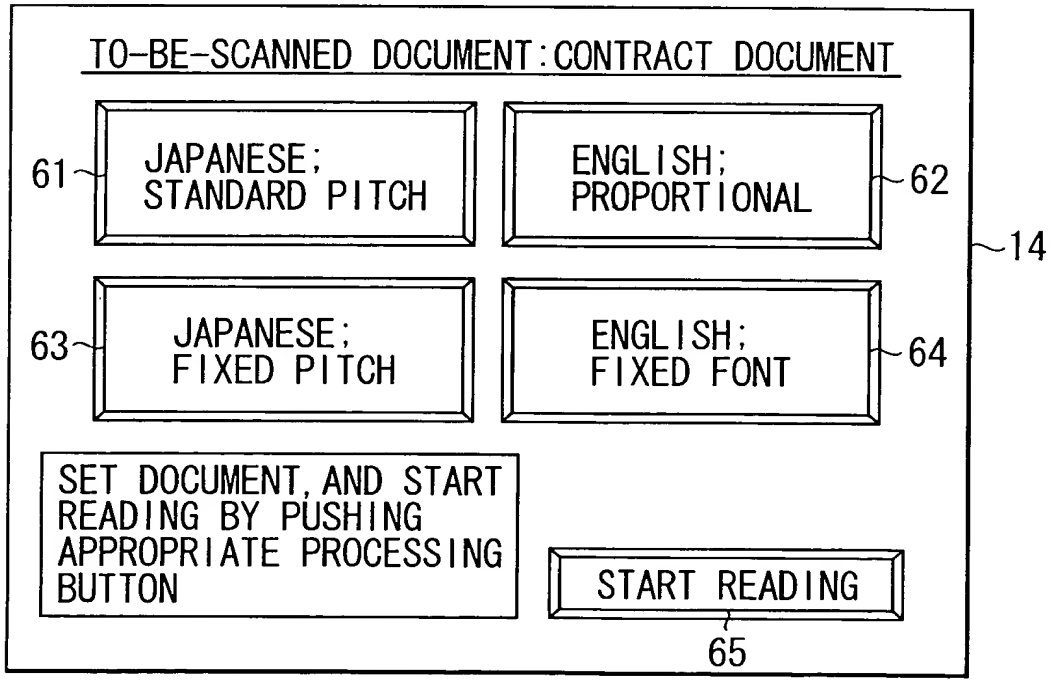
TO-BE-SCANNED DOCUMENT:CONTRACT DOCUMENT
61
JAPANESE; STANDARD PITCH
ENGLISH; PROPORTIONAL
62
14
63
JAPANESE; FIXED PITCH
ENGLISH; FIXED FONT
64
SET DOCUMENT, AND START READING BY PUSHING APPROPRIATE PROCESSING BUTTON
START READING
65

FIG. 4

EXAMPLE OF SCREEN FOR PREPARING INPUT PANEL BUTTON FOR BUSINESS DAILY REPORT

PANEL BUTTON PREPARING SCREEN

PANEL NAME:	YAMADA'S EXCLUSIVE USE
BUTTON NAME:	BUSINESS DAILY REPORT
DESTINATION FOLDER NAME:	BUSINESS DAILY REPORT
OCR PROCESSING:	YES
DICTIONARY TO BE USED FOR CHARACTER RECOGNITION:	GENERAL, MEDICAL PRACTICE
CONFIRMATION PRINTING:	NO
DOCUMENT SEPARATOR RECOGNITION:	YES
DOCUMENT AUTOMATIC DIVISION:	NO
OCR SETTING···LANGUAGE:	JAPANESE
OCR SETTING···CHARACTER PITCH:	STANDARD
OCR SETTING···PROCESSING RANGE:	ONE PAGE

PREPARE CANCEL

14

FIG. 5

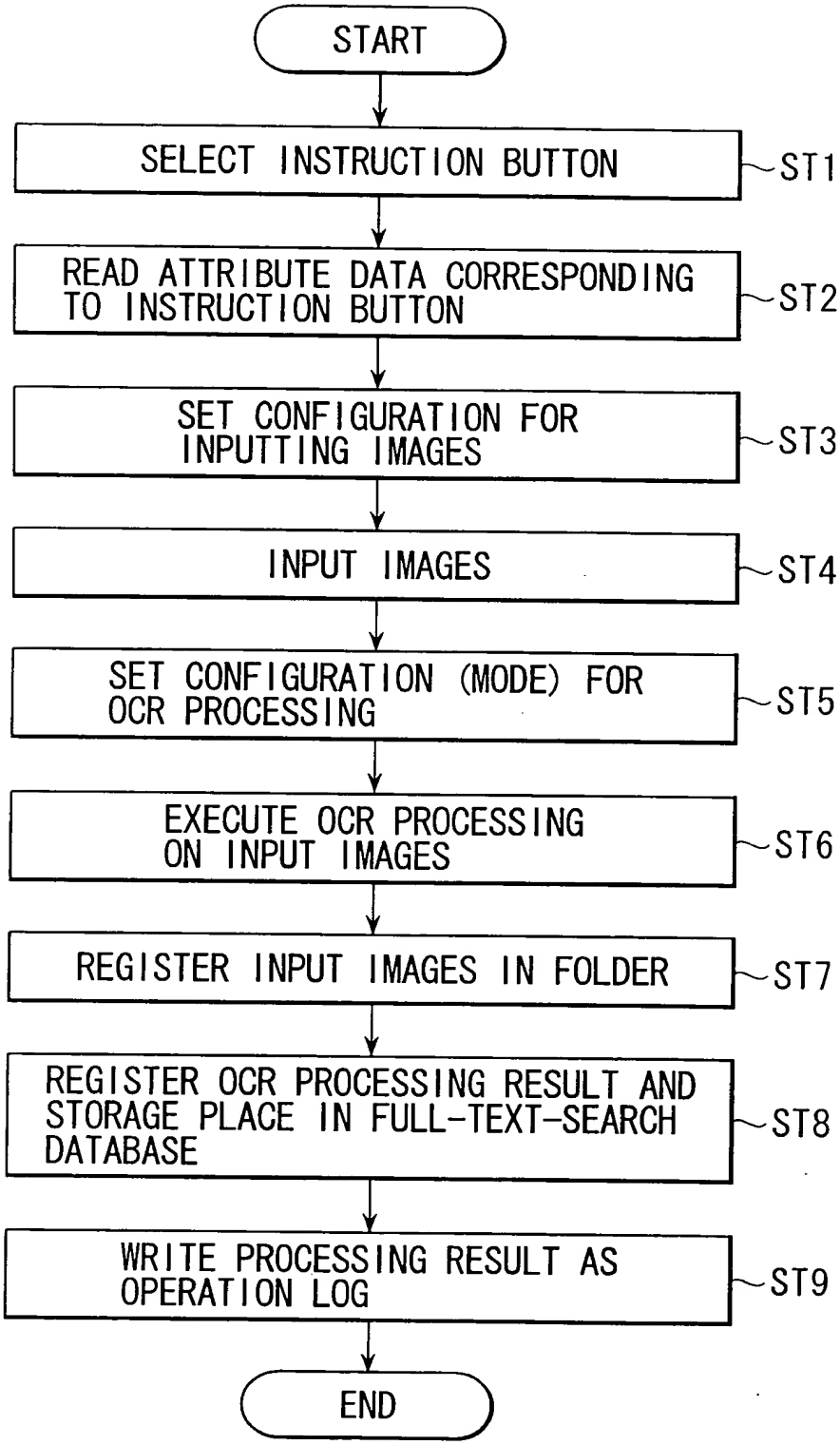
START
SELECT INSTRUCTION BUTTON
ST1
READ ATTRIBUTE DATA CORRESPONDING TO INSTRUCTION BUTTON
ST2
SET CONFIGURATION FOR INPUTTING IMAGES
ST3
INPUT IMAGES
ST4
SET CONFIGURATION (MODE) FOR OCR PROCESSING
ST5
EXECUTE OCR PROCESSING ON INPUT IMAGES
ST6
REGISTER INPUT IMAGES IN FOLDER
ST7
REGISTER OCR PROCESSING RESULT AND STORAGE PLACE IN FULL-TEXT-SEARCH DATABASE
ST8
WRITE PROCESSING RESULT AS OPERATION LOG
ST9
END

FIG. 6

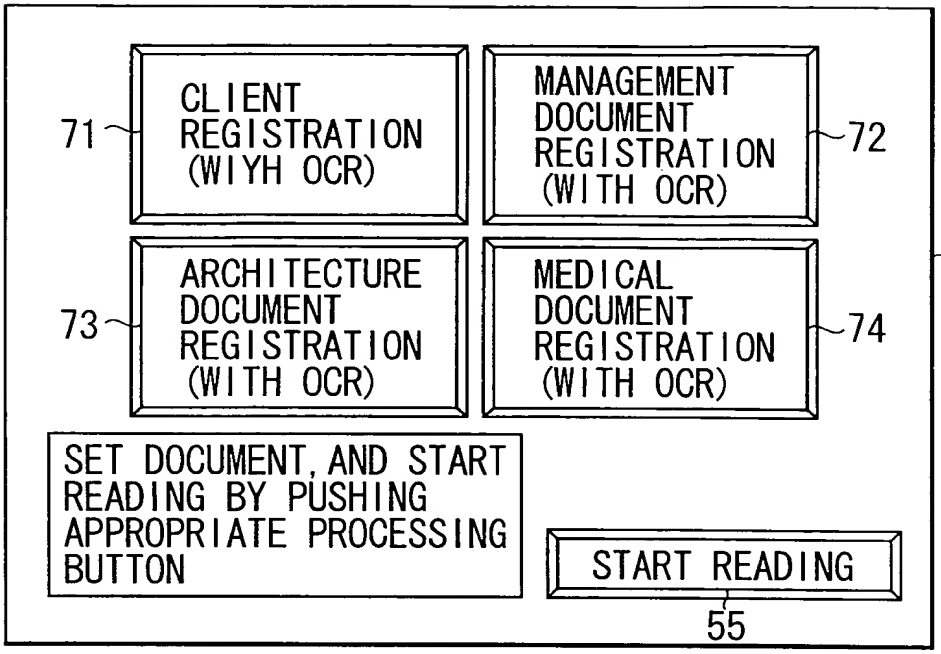

FIG. 7

15a

BUTTON NUMBER	BUTTON NAME	CONFIR-MATION PRINT-ING	SEPA-RATOR REC-OGNI-TION	DOCU-MENT DIVI-SION	DICTION-ARY FOR USE	OCR LAN-GUAGE	OCR PITCH	OCR PROCES-SING RANGE
1	CLIENT REGISTRA-TION	YES	NO	YES	NAME ADDRESS	JAPA-NESE	FIXED	ALL PAGES
2	MANAGE-MENT DOCUMENT REGISTRA-TION	YES	YES	YES	MANAGE-MENT ECONOMY	JAPA-NESE	STAND-ARD	ALL PAGES
3	ARCHITE-CTURE DOCUMENT REGISTRA-TION	YES	NO	YES	ARCHITE-CTURE	ENG-LISH	STAND-ARD	ONLY FIRST PAGE
3	MEDICAL DOCUMENT REGISTRA-TIONH	YES	NO	YES	MEDICAL PRACTICE	ENG-LISH	STAND-ARD	ALL PAGES

FIG. 8

PANEL BUTTON PREPARING SCREEN

PANEL NAME:	WITH OCR PROCESSING
BUTTON NAME:	CLIENT REGISTRATION
DESTINATION FOLDER NAME:	CLIENT LIST
OCR PROCESSING:	YES
DICTIONARY TO BE USED FOR CHARACTER RECOGNITION:	NAME ADDRESS
CONFIRMATION PRINTING:	YES
DOCUMENT SEPARATOR RECOGNITION:	NO
DOCUMENT AUTOMATIC DIVISION:	DIVIDE DOCUMENT IN UINTS OF 3 PAGES
OCR SETTING···LANGUAGE:	JAPANESE
OCR SETTING···CHARACTER PITCH:	FIXED
OCR SETTING···PROCESSING RANGE:	ALL PAGES

PREPARE CANCEL

14

FIG. 9

SCREEN FOR RETRIEVING DOCUMENT IMAGE

FOLDER TREE SEARCH:

BUSINESS DAILY REPORT(YAMADA)
BUSINESS DAILY REPORT(KATOH)

NATURAL LANGUAGE(FULL TEXT) SEARCH:

2a

LIST OF DOCUMENT IMAGES AS SEARCH RESULT:

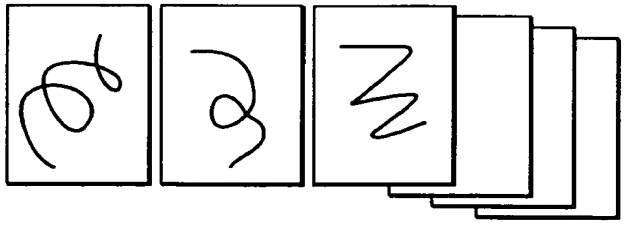

FIG. 10

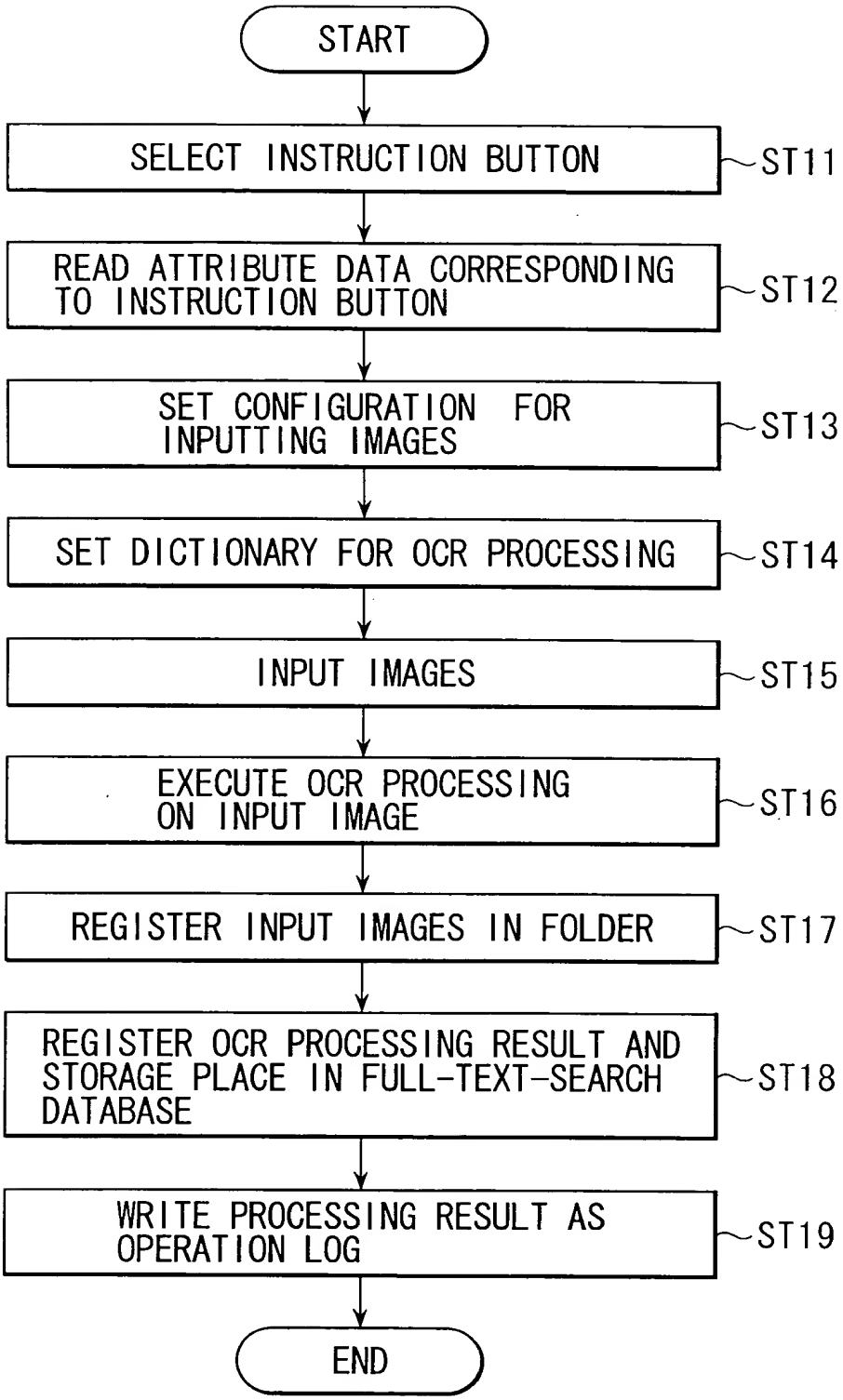
START
SELECT INSTRUCTION BUTTON
ST11
READ ATTRIBUTE DATA CORRESPONDING TO INSTRUCTION BUTTON
ST12
SET CONFIGURATION FOR INPUTTING IMAGES
ST13
SET DICTIONARY FOR OCR PROCESSING
ST14
INPUT IMAGES
ST15
EXECUTE OCR PROCESSING ON INPUT IMAGE
ST16
REGISTER INPUT IMAGES IN FOLDER
ST17
REGISTER OCR PROCESSING RESULT AND STORAGE PLACE IN FULL-TEXT-SEARCH DATABASE
ST18
WRITE PROCESSING RESULT AS OPERATION LOG
ST19
END

FIG. 11

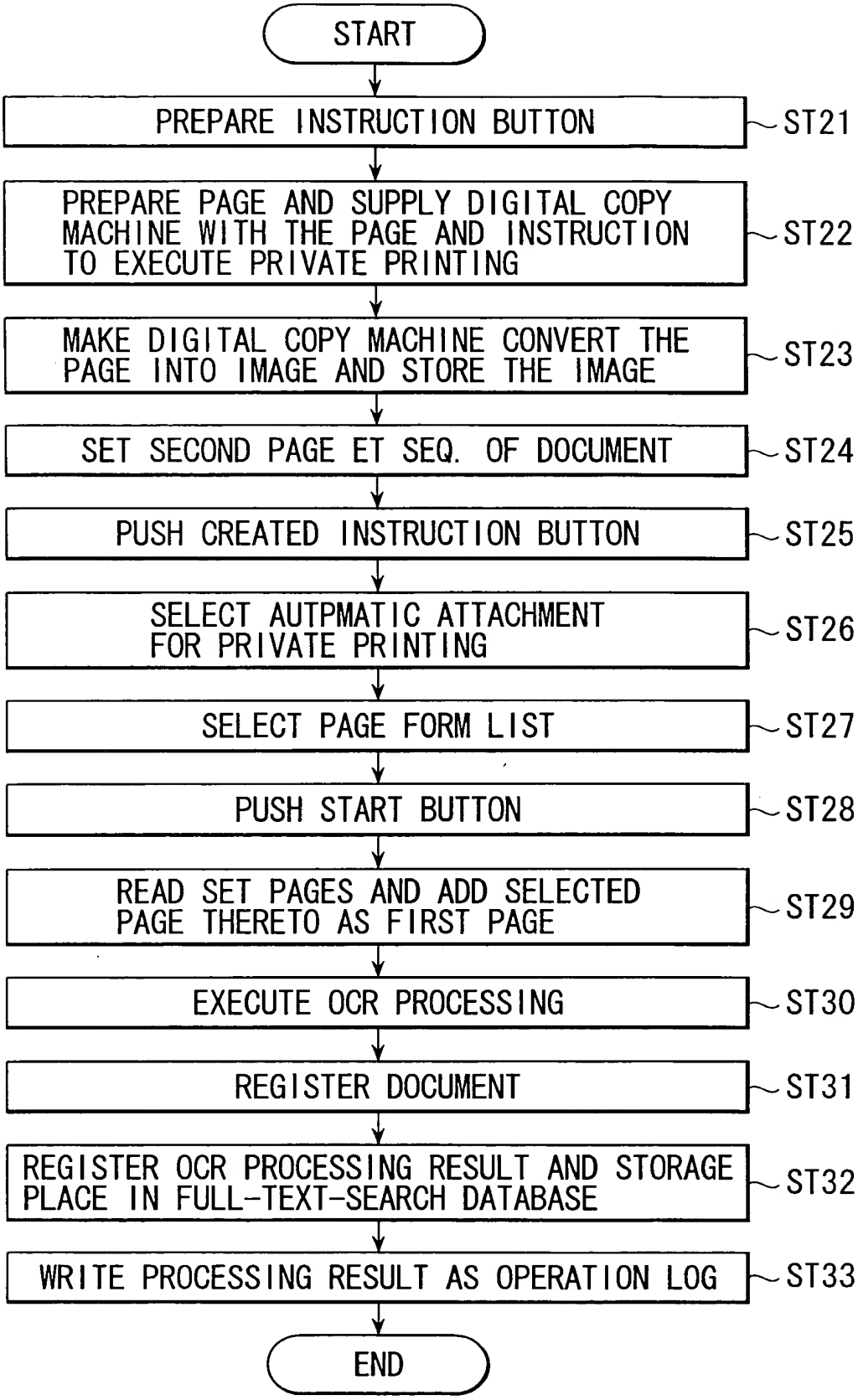
START
PREPARE INSTRUCTION BUTTON
ST21
PREPARE PAGE AND SUPPLY DIGITAL COPY MACHINE WITH THE PAGE AND INSTRUCTION TO EXECUTE PRIVATE PRINTING
ST22
MAKE DIGITAL COPY MACHINE CONVERT THE PAGE INTO IMAGE AND STORE THE IMAGE
ST23
SET SECOND PAGE ET SEQ. OF DOCUMENT
ST24
PUSH CREATED INSTRUCTION BUTTON
ST25
SELECT AUTPMATIC ATTACHMENT FOR PRIVATE PRINTING
ST26
SELECT PAGE FORM LIST
ST27
PUSH START BUTTON
ST28
READ SET PAGES AND ADD SELECTED PAGE THERETO AS FIRST PAGE
ST29
EXECUTE OCR PROCESSING
ST30
REGISTER DOCUMENT
ST31
REGISTER OCR PROCESSING RESULT AND STORAGE PLACE IN FULL-TEXT-SEARCH DATABASE
ST32
WRITE PROCESSING RESULT AS OPERATION LOG
ST33
END

FIG. 12

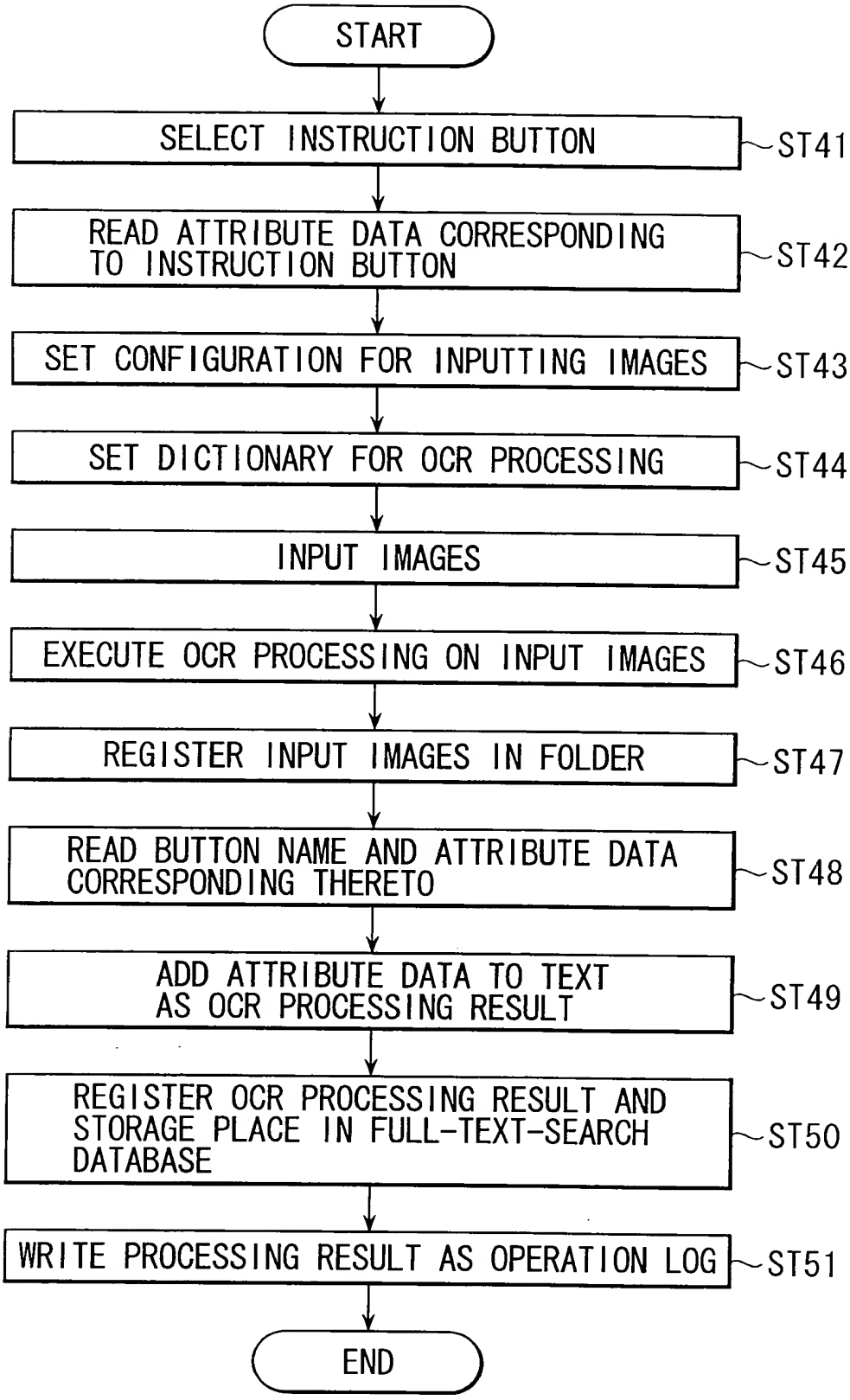
START
SELECT INSTRUCTION BUTTON
ST41
READ ATTRIBUTE DATA CORRESPONDING TO INSTRUCTION BUTTON
ST42
SET CONFIGURATION FOR INPUTTING IMAGES
ST43
SET DICTIONARY FOR OCR PROCESSING
ST44
INPUT IMAGES
ST45
EXECUTE OCR PROCESSING ON INPUT IMAGES
ST46
REGISTER INPUT IMAGES IN FOLDER
ST47
READ BUTTON NAME AND ATTRIBUTE DATA CORRESPONDING THERETO
ST48
ADD ATTRIBUTE DATA TO TEXT AS OCR PROCESSING RESULT
ST49
REGISTER OCR PROCESSING RESULT AND STORAGE PLACE IN FULL-TEXT-SEARCH DATABASE
ST50
WRITE PROCESSING RESULT AS OPERATION LOG
ST51
END

FIG. 13

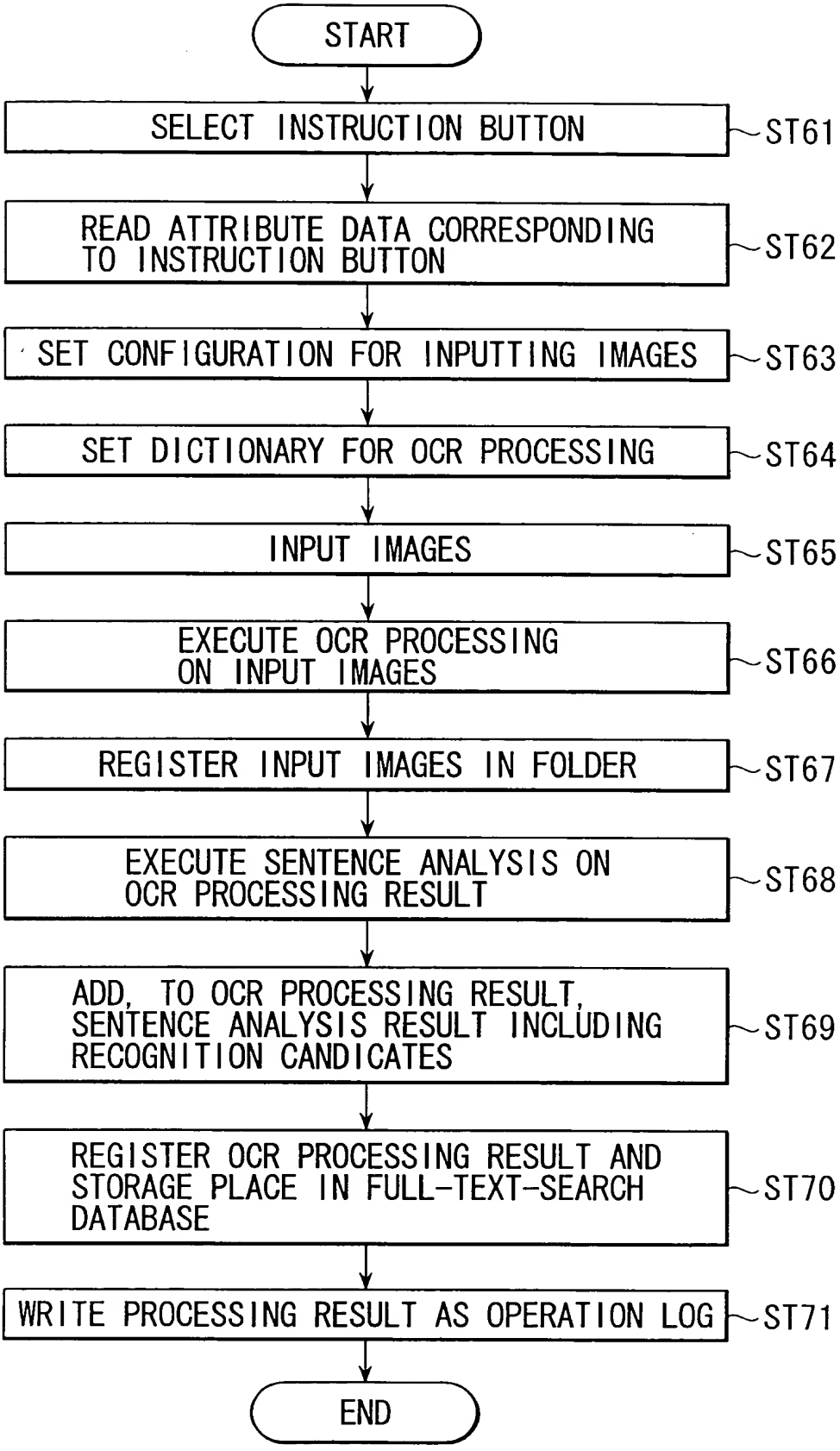
START
SELECT INSTRUCTION BUTTON
ST61
READ ATTRIBUTE DATA CORRESPONDING TO INSTRUCTION BUTTON
ST62
SET CONFIGURATION FOR INPUTTING IMAGES
ST63
SET DICTIONARY FOR OCR PROCESSING
ST64
INPUT IMAGES
ST65
EXECUTE OCR PROCESSING ON INPUT IMAGES
ST66
REGISTER INPUT IMAGES IN FOLDER
ST67
EXECUTE SENTENCE ANALYSIS ON OCR PROCESSING RESULT
ST68
ADD, TO OCR PROCESSING RESULT, SENTENCE ANALYSIS RESULT INCLUDING RECOGNITION CANDICATES
ST69
REGISTER OCR PROCESSING RESULT AND STORAGE PLACE IN FULL-TEXT-SEARCH DATABASE
ST70
WRITE PROCESSING RESULT AS OPERATION LOG
ST71
END

FIG. 14

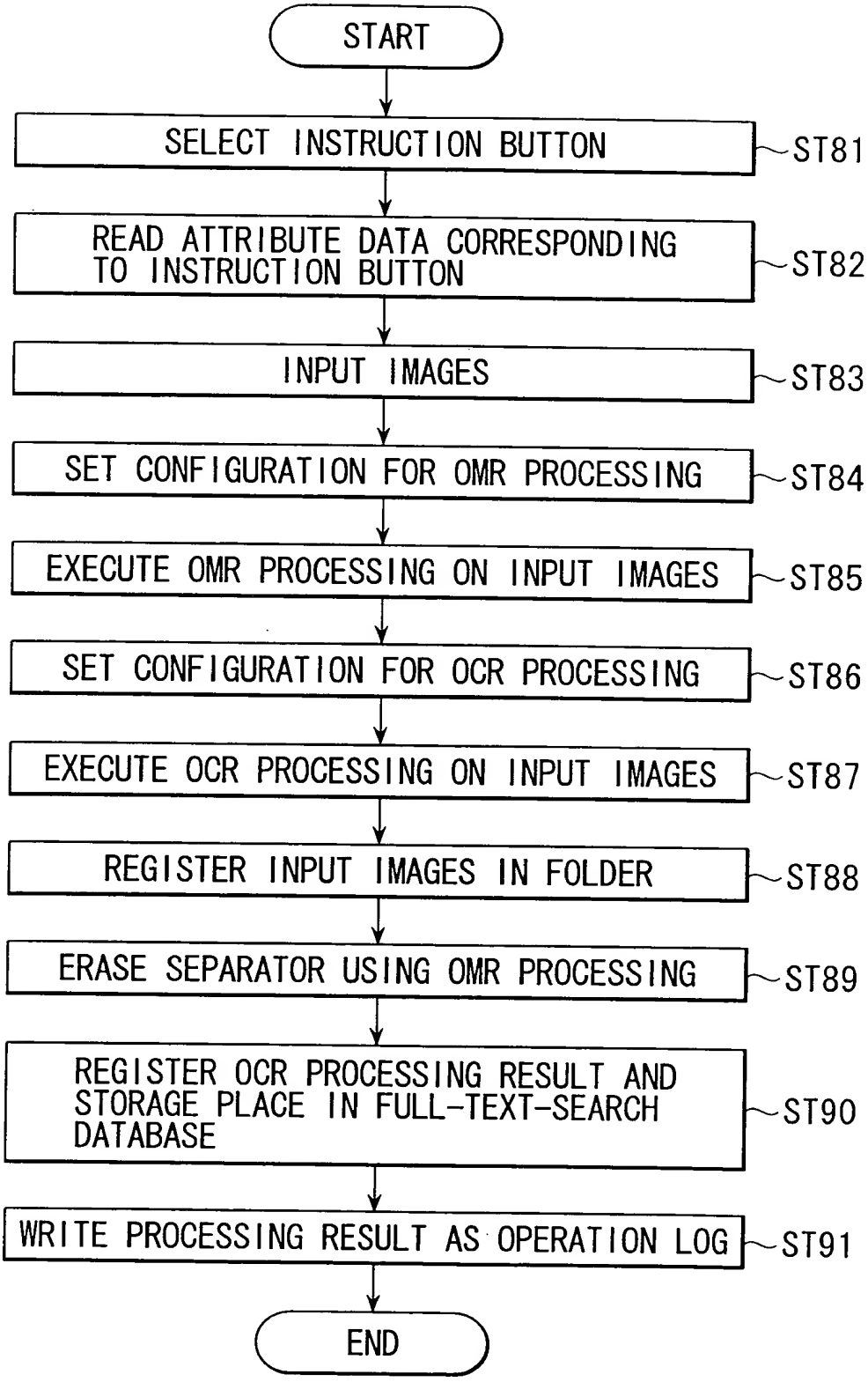
START
SELECT INSTRUCTION BUTTON
ST81
READ ATTRIBUTE DATA CORRESPONDING TO INSTRUCTION BUTTON
ST82
INPUT IMAGES
ST83
SET CONFIGURATION FOR OMR PROCESSING
ST84
EXECUTE OMR PROCESSING ON INPUT IMAGES
ST85
SET CONFIGURATION FOR OCR PROCESSING
ST86
EXECUTE OCR PROCESSING ON INPUT IMAGES
ST87
REGISTER INPUT IMAGES IN FOLDER
ST88
ERASE SEPARATOR USING OMR PROCESSING
ST89
REGISTER OCR PROCESSING RESULT AND STORAGE PLACE IN FULL-TEXT-SEARCH DATABASE
ST90
WRITE PROCESSING RESULT AS OPERATION LOG
ST91
END

FIG. 15

0087607 T20t9960

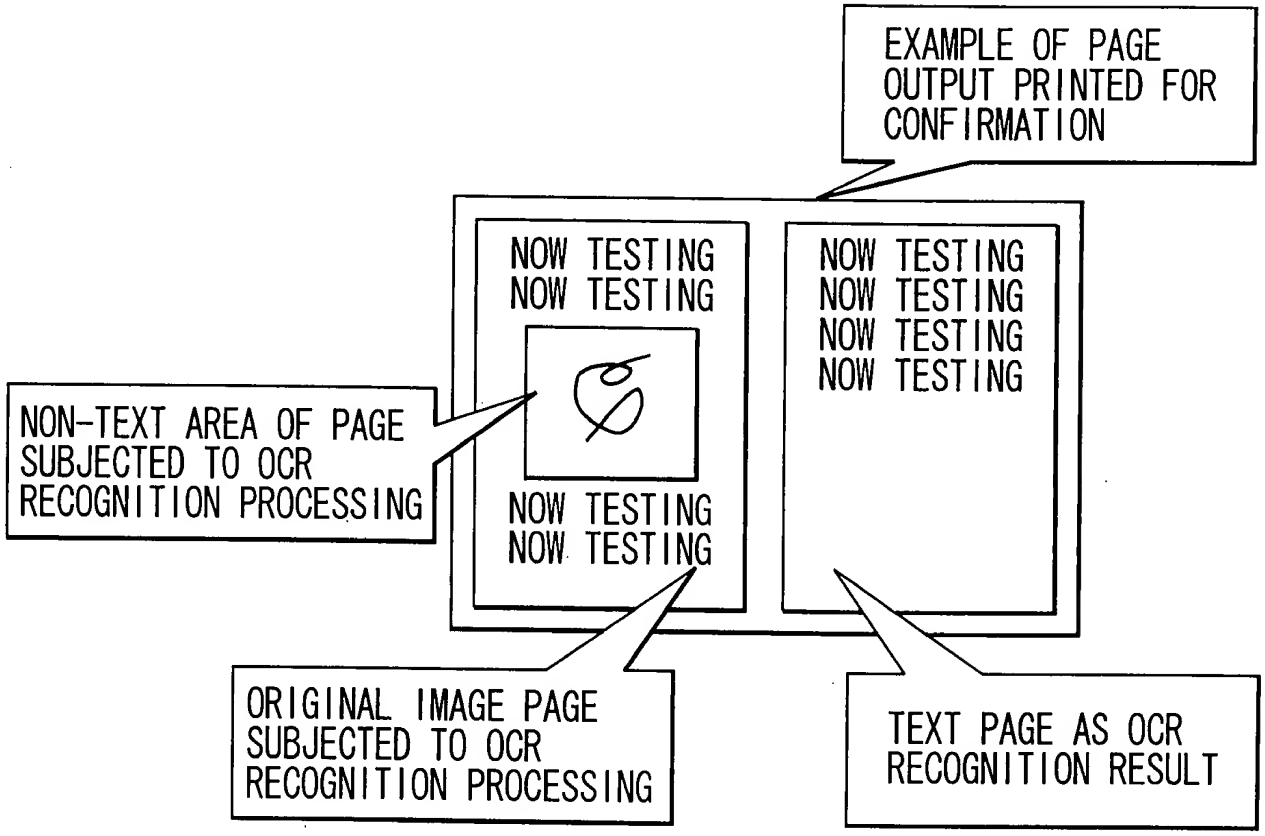

FIG. 16

JP2006-074960

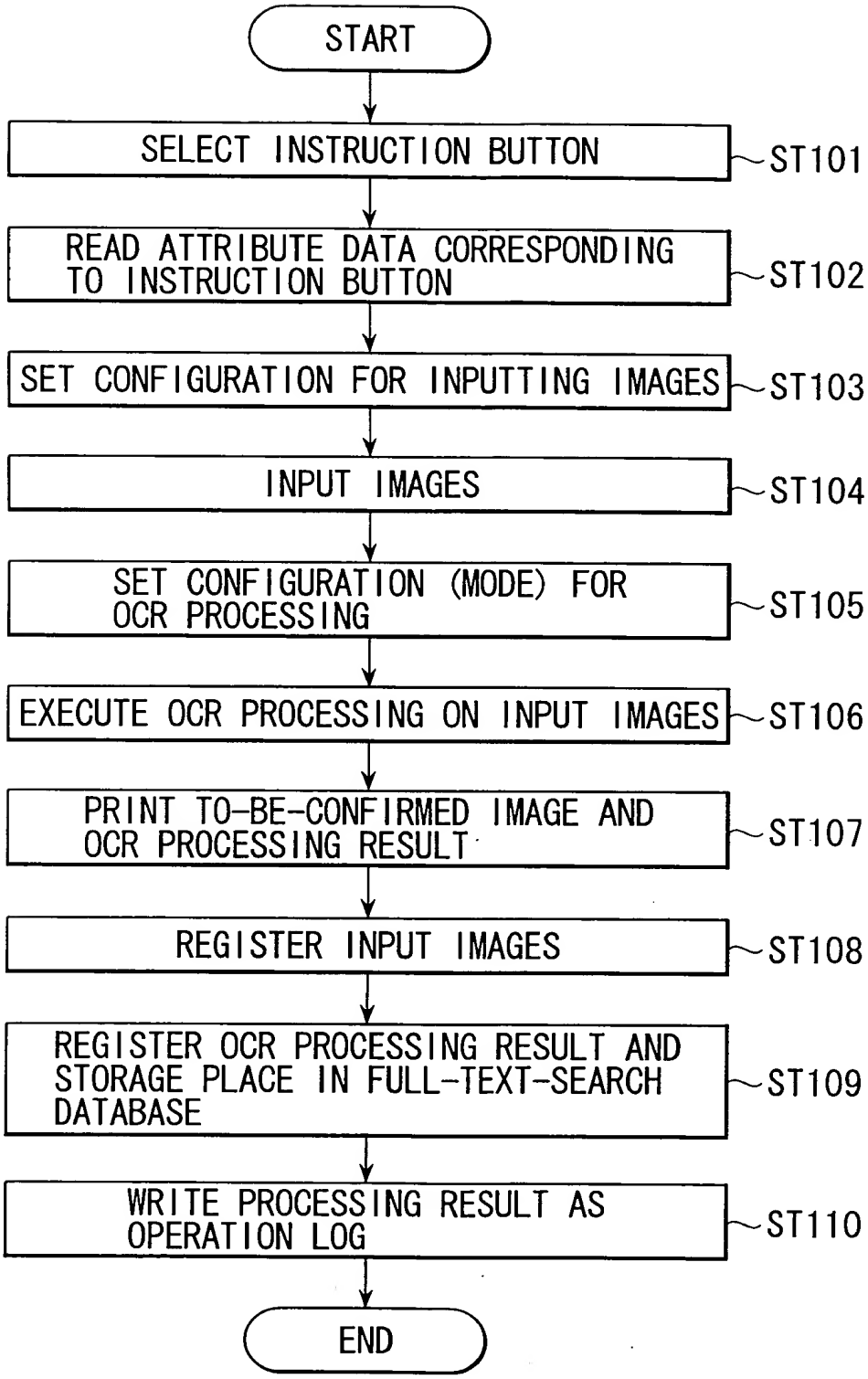

FIG. 17

008780 T20n9960

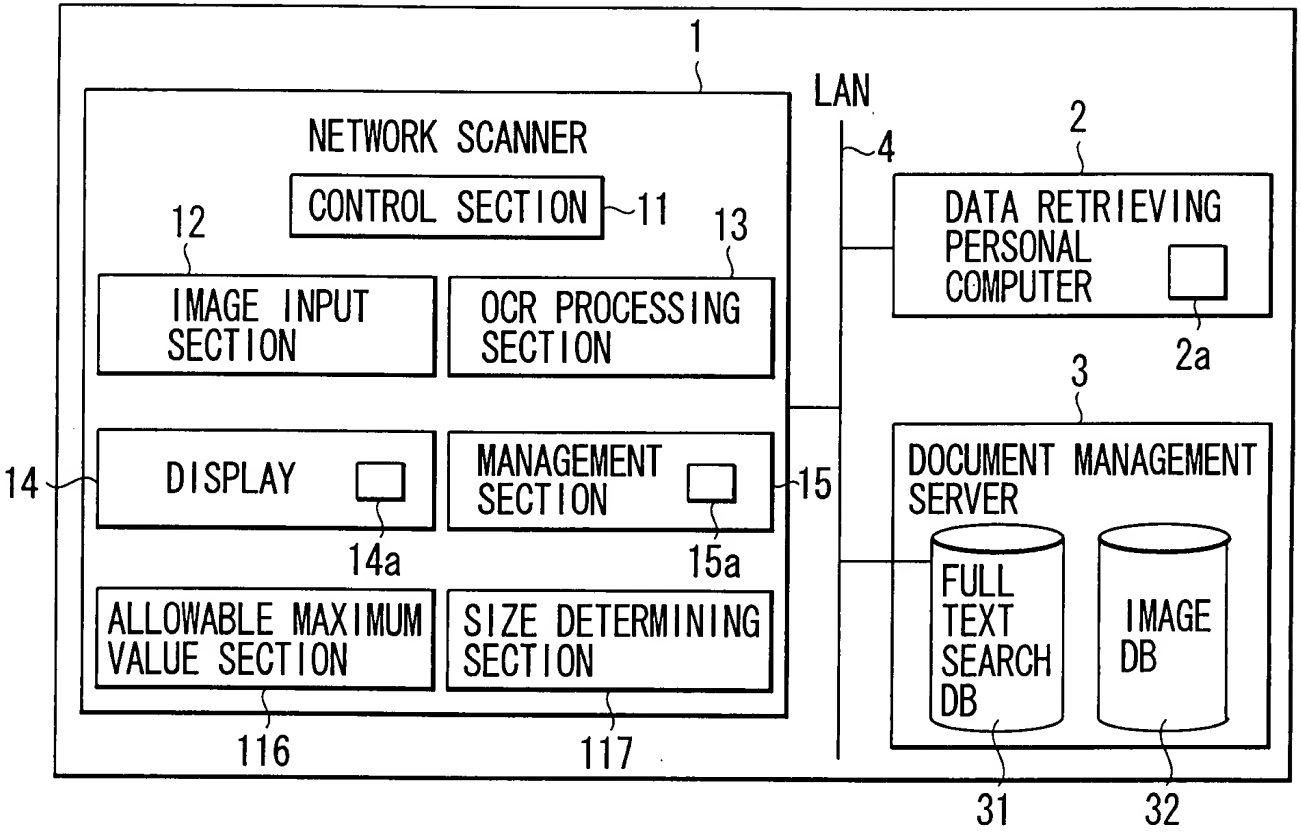

FIG. 18

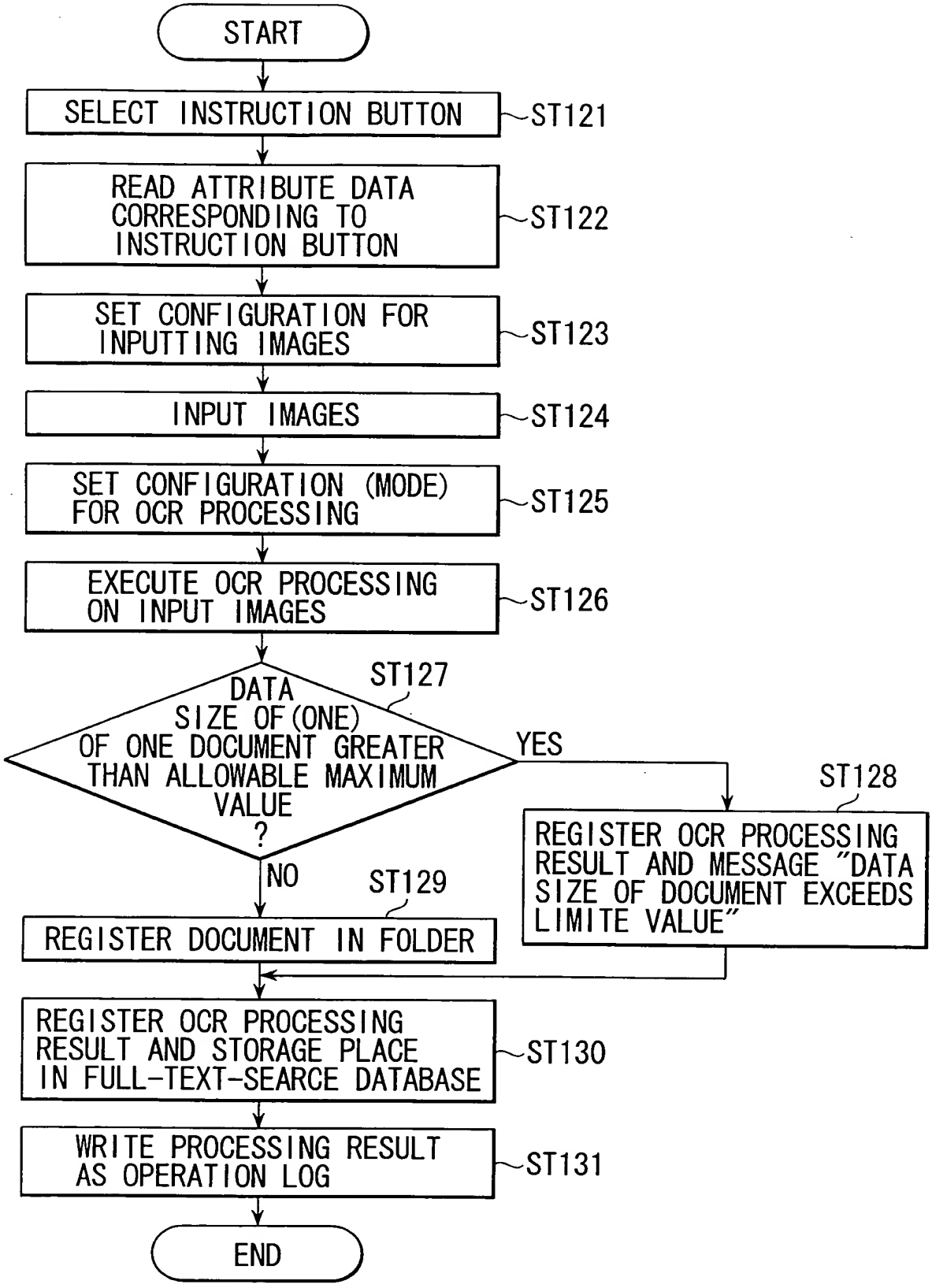
START
SELECT INSTRUCTION BUTTON
ST121
READ ATTRIBUTE DATA CORRESPONDING TO INSTRUCTION BUTTON
ST122
SET CONFIGURATION FOR INPUTTING IMAGES
ST123
INPUT IMAGES
ST124
SET CONFIGURATION (MODE) FOR OCR PROCESSING
ST125
EXECUTE OCR PROCESSING ON INPUT IMAGES
ST126
ST127
DATA SIZE OF(ONE) OF ONE DOCUMENT GREATER THAN ALLOWABLE MAXIMUM VALUE ?
YES
NO
ST128
REGISTER OCR PROCESSING RESULT AND MESSAGE "DATA SIZE OF DOCUMENT EXCEEDS LIMITE VALUE"
ST129
REGISTER DOCUMENT IN FOLDER
REGISTER OCR PROCESSING RESULT AND STORAGE PLACE IN FULL-TEXT-SEARCE DATABASE
ST130
WRITE PROCESSING RESULT AS OPERATION LOG
ST131
END

FIG. 19

DATE	EVENT LEVEL	CONTENTS OF OPERATION
1999-10-01@10:10	NORMALLY TERMINATED	DOCUMENT WAS REGISTERED IN BUSINESS DAILY REPORT (YAMADA).
1999-10-01@10:15	WARNING	SINCE INPUT IMAGE SIZE EXCEEDED ALLOWABLE SIZE (2MB), ONLY OCR PROCESSING RESULT WAS REGISTERED IN BUSINESS DAILY REPORT (YAMADA).

FIG. 20